Volume 7.07: February 27, 2023

Publications of the Week

A Luciferase Reporter Mouse Model to Optimize *In Vivo* Gene Editing Validated by Lipid Nanoparticle Delivery of Adenine Base Editors

First Author: Si-Yue Yu | Senior Author: Colin Ross *(pictured)*
Molecular Therapy | UBC

The rapid development of CRISPR genome editing technology has provided the potential to treat genetic diseases effectively and precisely. However, efficient and safe delivery of genome editors to affected tissues remains a challenge. The authors developed luminescent ABE, a luciferase reporter mouse model containing the R387X mutation in the luciferase gene located in the *Rosa26* locus of the mouse genome. **Abstract**

Development and Validation of an Advanced *Ex Vivo* Brain Slice Invasion Assay to Model Glioblastoma Cell Invasion into the Complex Brain Microenvironment

First Author: Lisa Decotret | Senior Author: Kevin Bennewith *(pictured)*
Frontiers in Oncology | BC Cancer, BC Children's Hospital Research Institute, and UBC

Organotypic cultures of murine brain slices are well-established tools in neuroscience research, including electrophysiology studies, modeling neurodegeneration, and cancer research. The authors present an optimized *ex vivo* brain slice invasion assay that models glioblastoma multiforme cell invasion into organotypic brain slices. **Abstract**

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Awards

Drs. Michael Cox, Kish Wasan, Nathan Lack and Syam Somasekharan Awarded the Canadian Institutes of Health Research Grant

Vancouver Prostate Centre

Congratulations to Drs. Michael Cox *(pictured)*, Kish Wasan, Nathan Lack, Syam Somasekharan and their teams on being awarded the five-year Canadian Institutes of Health Research Project Grant for an amount of $956,250. The grant is titled, 'Understanding epigenetic regulation and modulation of cell stress responses by the cholesterol transporter, scavenger receptor-B1 as a novel target for treating advanced prostate cancer.' **Read More**

Faculty of Medicine Researchers Awarded $26 Million Through CIHR Project Grants

UBC Faculty of Medicine

A total of 54 projects led by UBC Faculty of Medicine researchers were awarded more than $26 million in combined funding through the Canadian Institutes of Health Research (CIHR) Project Grant: Fall 2022 competition. Drs. Michael Anglesio *(pictured)*, Aline Talhouk, and Mark Carey are leading a project to deconvolute prognostic and targeted features of endometrioid ovarian carcinomas of no specific molecular profile. **Read More**

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Local News

Bioprinting: The Next Frontier

Michael Smith Health Research BC

Bioprinting is an extension of traditional 3D printing; it can produce living tissue, bone, blood vessels and, potentially, whole organs for use in medical procedures. The field of bioprinting is growing rapidly and Michael Smith Health Research BC awardee, Dr. Stephanie Willerth *(pictured)*, has developed new and unique 'bioink' to produce these futuristic materials. **Read More**

ECE/UBC Researchers Are Changing Pressure Sensors and Their Potential Applications

UBC Department of Electrical and Computer Engineering (ECE)

Through the hard work and determination carried out by members of the Department of Electrical and Computer Engineering and the School of Biomedical Engineering, we are seeing advances in the use of pressure microsensors with remarkable performance. Dr. Nabil Shalabi, Kyle Searles, and Dr. Kenichi Takahata *(pictured)* recently had their article "Switch Mode Capacitive Pressure Sensors" published in *Nature Microsystems and Nanoengineering*. **Read More**

BC Building Talent Pool to Support Life Sciences, Biomanufacturing

Life Sciences BC

More people will soon have access to hands-on training in a new state-of-the-art training centre to help them get skills for jobs in life sciences and biomanufacturing, supporting companies to help address some of the world's most pressing health-care challenges. The government of BC and PacifiCan are making a combined investment of $7.2 million to create a new BC National Biomanufacturing Training Centre at BCIT. **Read More**

Q&A with BRAvE Researchers Amanda Lorentzian and Dr. Nina Rolf

BC Children's Hospital

The Better Responses through Avatars and Evidence (BRAvE) Initiative at BC Children's Hospital is revolutionizing precision treatments for children with cancer. They seek to increase the number of children who can benefit from treatments targeted at attributes of individual tumours. Amanda Lorentzian *(pictured, left)* and Dr. Nina Rolf *(right)* discuss their roles in the BRAvE Initiative and what makes BRAvE an exciting and unique precision medicine approach. **Read More**

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Interesting Articles

Feds Restrict Funding of Research with Foreign Agencies Deemed to Pose Security Risk

Business in Vancouver

The federal government says it is tightening its policy on bankrolling research with foreign entities that might pose a risk to national security. The government says "a sensitive research area" will not be funded if a person on the project is affiliated with a university, research institute, or laboratory connected to military, national defence, or state security entities of foreign powers considered to be a risk. **Read More**

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Upcoming Events in Vancouver

February 28 3:00 PM	**In Good Company: The Human Trial** Gordon and Leslie Diamond Health Care Centre
March 2 2:30 PM	**How Full Is the Brain's Petrol Tank? Evidence from Models of Metabolic Depletion** Shrum Science Centre
March 3 1:00 PM	**Three Minute Thesis: VCHRI and UBC Heat** Vancouver General Hospital
March 9 3:00 PM	**Global Health Access & Equity Issues in LMICs and HICs: Compare & Contrast** UBC
March 16 7:00 PM	**Spring Break Science Slam** Fox Cabaret

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STEMCELL Jobs in Vancouver

Research Technologist, Tissue and Cell Biology
STEMCELL Technologies

Senior Program Associate, Content Editing
STEMCELL Technologies

Manufacturing Technologist, Labs
STEMCELL Technologies

Project Manager, Marketing
STEMCELL Technologies

Senior Program Associate, New Product Introduction
STEMCELL Technologies

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Product Launch and Sustaining Manager
BioLytical Laboratories

Manager, External Quality Drug Substance
AbCellera

Technical & Customer Support Specialist, Biotechnology
Applied Biological Materials

Animal Research Associate II
Zymeworks

Research Technician, BPSc Program
UBC

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